BELZONA 6111 Product Specification Sheet

1. PRODUCT NAME
Belzona® 6111
(Liquid Anode)

2. MANUFACTURER
Belzona Inc.,
2000 NW 88th Court,
Miami, Florida 33172

Belzona Polymerics Ltd.,
Claro Road, Harrogate,
HG1 4DS, England.

3. PRODUCT DESCRIPTION
A two part zinc rich epoxy system providing corrosion protection to steel-work. The material is solvent based and can be brush or spray applied.

Applications
All structural steelwork
Tanks
Pipes
Cooling Towers
Bridges

4. TECHNICAL DATA
Base Component:

Appearance	Viscous Liquid
Color	Gray
Odor	Solvent
Viscosity	2.4 - 3.4 Poise
Solids by weight	87.6%
Solids by volume	53.2%
Density	3.275 - 3.342g/cm³
Flash Point	>73°F (23°C)

Solidifier Component:

Appearance	Mobile liquid
Color	Blue or Amber
Odor	Solvent
Density Blue	0.92 - 0.93 g/cm³
Gray	0.905 - 0.915 g/cm³
Solids by weight	31.8 %
Solids by volume	26.8 %
Flash point	> 73°F (23°C)

Mixed Components:

Mixing Ratio by Volume (Base : Solidifier)	3.5 : 1
Density	2.62g/cm³
Solids by weight	84%
Solids by volume	49%
wet film thickness	3 mils (76 microns)
dry film thickness	1½ mils (38 microns)
Appearance	Liquid
Color	Blue or gray
Odor	Solvent

• ***Zinc Content:***
The zinc content of the applied dry film is not less than 90%.

• ***VOC Content:***

	lbs/US gal	g/liter
Base	3.41	408
Solidifier	5.37	643
Mixed	3.96	475

• ***Shelf Life:***
Separate base and solidifier components will have a guaranteed minimum shelf life of 3 years when stored between 32°F (0°C) and 86°F (30°C).

• ***Working Life:***
Once mixed the usable life will vary with temperature.

50°F (10°C)	72 hours
68°F (20°C)	48 hours
86°F (30°C)	24 hours

• ***Coverage Rate:***
The average practical coverage rate for two coats at 1½ mils dry film thickness per coat (total 3 mils or 76 microns) is 19.4 sq.ft. (1.8 sq.m.) per kg.

• ***Cure Time:***
Allow to solidify for the times shown in the chart below before subjecting it to the condition indicated.

5. PHYSICAL/MECHANICAL PROPERTIES
Determined after 7 days cure at 77°F (25°C)

• ***Adhesion***
Cross Hatch
When tested in accordance with BS 3900 Part E6 a 100% pass is obtained.

Tensile Shear
When tested in accordance with ASTM D1002 the typical tensile shear adhesion obtained is 1150 psi (80 kg/cm²).

• ***Chemical Resistance:***
If the **Belzona® 6111** system is likely to come into contact with aggressive chemicals, **Belzona® 5111** (Ceramic Cladding) should be used to overcoat the **Belzona® 6111**. For further details contact your Local Belzona Technical Consultant.

• ***Corrosion Resistance:***
BS 3900: Part F4 artificial sea water spray 3,000 hours exposure with no corrosion breakdown on the system.

BS 3900: Part F3 artificial weathering 60 weeks (equivalent to 20 years natural weathering) with no corrosion breakdown on the system.

• ***Flexibility:***
Tested on a ½" diameter mandrel a pass is achieved with no cracking or flaking.

• ***Heat Resistance:***
For many typical applications the material is suitable for use between -40°F (-40°C) and 140°F(60°C) Wet 392°F (200°C) Dry

• ***Impact Resistance***
When tested in accordance with BS 3900 Part E3 a pass is obtained up to 1/20 inch (1.25 mm).

CURE TIMES

	Overcoating Time			
Temperature	**Touch Dry**	**Minimum**	**Maximum**	**Full Cure**
50°F (10°C)	17 min	32 hrs	7 days	10 days
68°F (20°C)	10 min	16 hrs	5 days	7 days
86°F (30°C)	3 min	8 hrs	3 days	5 days

6. SURFACE PREPARATION AND APPLICATION PROCEDURES

For proper technique, refer to Belzona® Instructions For Use Leaflet which is enclosed with each packaged product.

7. AVAILABILITY AND COST

Belzona® 6111 is available from a network of Belzona® Distributors throughout the world for prompt delivery to the application site. For information, consult the Belzona® Distributor in your area.

8. WARRANTY

Belzona® guarantees this product will meet the performance claims stated herein when material is stored and used as instructed in the Belzona® Instructions For Use leaflet. Belzona® further guarantees that all its products are carefully manufactured to ensure the highest quality possible and tested strictly in accordance with universally recognised standards (ASTM, ANSI, BS, DIN, etc.). Since Belzona® has no control over the use of the product described herein, no warranty for any application can be given.

9. TECHNICAL SERVICES

Complete technical assistance is available and includes fully trained Technical Consultants, technical service personnel and fully staffed research, development and quality control laboratories.

10. HEALTH AND SAFETY

Prior to using this material, please consult the relevant Material Safety Data Sheets.

11. APPROVALS/ ACCEPTANCES

U.S.D.A.

The technical data contained herein is based on the results of long term tests carried out in our laboratories and to the best of our knowledge is true and accurate on the date of publication. It is however subject to change without prior notice and the user should contact Belzona to verify the technical data is correct before specifying or ordering. No guarantee of accuracy is given or implied. We assume no responsibility for rates of coverage, performance or injury resulting from use. Liability, if any, is limited to the replacement of products. No other warranty or guarantee of any kind is made by Belzona, express or implied, whether statutory, by operation of law or otherwise, including merchantability or fitness for a particular purpose.

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Repair • Protect • Improve

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